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## PCT/KR2004/002631

## Claims

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 An air flow passage of a microwave oven comprising:

a cavity for accommodating foods therein;

an electric component chamber disposed at a predetermined portion of the cavity;

a suction hole formed at one sided portion of the cavity such that the cavity communicates with the electric component chamber;

an exhaust hole formed at the other sided portion of the cavity, through which air sucked through the suction hole is exhausted;

an exhaust guide covering an outer wall of the cavity where the exhaust hole is formed, for guiding air exhausted through the exhaust hole to an outside of the microwave oven; and

- a back plate having an exhaust passage hole communicating with one end of the exhaust guide, through which air is exhausted.
- 2. The air flow passage according to claim 1, wherein the suction hole and/or the exhaust hole are/or formed at an interval portion between a bottom plate of the cavity and a plate on which the foods are loaded.
- 3. The air flow passage according to claim 1, wherein the exhaust guide forms a predetermined space at a portion between the exhaust guide and an outer surface of a sidewall of the cavity.
- 4. The air flow passage according to claim 1, wherein the exhaust guide has at least two portions that are different in width.
  - 5. The air flow passage according to claim 1,

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wherein the exhaust guide comprises:

a guide portion of which width is narrowed such that the air exhausted through the exhaust hole is concentrated; and

an exhaust portion of which width is widened such that the air is exhausted to an outside.

- 6. The air flow passage according to claim 1, wherein the exhaust guide is separatable from the microwave oven and is fixed to an outer circumference of the cavity.
  - 7. The air flow passage according to claim 1, further comprising a convexoconcave portion provided at a predetermined portion corresponding to the exhaust guide and the cavity, for preventing the exhaust guide from shaking.
  - 8. The air flow passage according to claim 1, wherein the exhaust passage hole is inclined downwardly as it travels to an outside.
  - 9. The air flow passage according to claim 1, further comprising a water permeation preventing portion formed at an upper portion of the exhaust passage hole, for preventing water from permeating into an inside of the microwave oven.
  - 10. The air flow passage according to claim 1, wherein the exhaust guide is screwed to a sub-plate formed at a bottom of the cavity.
  - 11. The air flow passage according to claim 1, further comprising a stirrer fan disposed at a connection passage of the suction hole and the exhaust hole, for radiating at least microwave.
    - 12. The air flow passage according to claim 1,

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wherein the suction hole and/or the exhaust hole are/is formed at a lower side portion of the cavity.

- 13. An air flow passage of a microwave oven
  5 comprising:
  - a suction hole formed between a plate on which foods are placed and a cavity, through which air of an electric component chamber is introduced;
- an exhaust hole through which air introduced through the suction hole is exhausted;
  - an exhaust guide for guiding air exhausted through the exhaust hole to an outside of the microwave oven; and
  - a back plate having an exhaust passage hole for exhausting the air guided by the exhaust guide to an outside of the microwave oven.
  - 14. The air flow passage according to claim 13, wherein the exhaust guide is fixed by a fixing terminal and a fixing portion protruded from the exhaust guide, the fixing terminal being formed at one sided portion of a sub-plate supporting a lower surface of the cavity.
  - 15. The air flow passage according to claim 13, further comprising:
- a shaking preventing protrusion formed at a predetermined portion of an edge of the exhaust guide; and
  - a shaking preventing hole formed at an outer surface of the cavity, into which the shaking preventing protrusion is inserted.
  - 16. The air flow passage according to claim 13, wherein the exhaust passage hole is formed penetrating the back plate.
- 35 17. The air flow passage according to claim 16, further comprising a water permeation preventing guide formed

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at an upper side of the exhaust passage hole.

18. An air flow passage of a microwave oven comprising:

an exhaust hole formed perforating a wall surface of one side of a cavity, through which an inner air of the cavity is exhausted;

an exhaust guide covering the exhaust hole and guiding air exhausted through the exhaust hole to an outside of the microwave oven; and

a plate having an exhaust passage hole communicating with an inside of the exhaust guide and forming an outer wall of one side of the microwave oven.

- 19. The air flow passage according to claim 18, wherein the exhaust guide has an inner space isolated by an inner surface of the exhaust guide, an outer circumference of one side of the cavity, and an inner surface of the back plate from an outside.
  - 20. The air flow passage according to claim 18, wherein the exhaust guide comprises:
  - a guide portion where the air exhausted through the exhaust hole is concentrated; and
  - an exhaust portion where the air concentrated on the guide portion is exhausted to an outside of the microwave oven.
- 21. The air flow passage according to claim 18, wherein the exhaust guide has at least two portions that are different in width.